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28165	7590	02/24/2004		
S.C. JOHNSON & SON, INC. 1525 HOWE STREET RACINE, WI 53403-2236			EXAMINER ELOSHWAY, NIKI MARINA	
			ART UNIT 3727	PAPER NUMBER
DATE MAILED: 02/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

S.R

# Office Action Summary

Application No.

10/092,469

Applicant(s)

ZETTLE ET AL.

Examiner

Niki M. Eloshway

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Fioravanti et al. (U.S. 6,273,305). Fioravanti et al. teaches a valve assembly shown in figure 1 having a valve housing 32, a valve 10 and a retainer 34. The valve housing has a top portion at lead line 12, a tubular retaining wall adjacent element 36, a valve seat adjacent lead line 26, a shoulder at 36 and a first seating surface at 26. The valve 10 has a flange at 20 with a top surface and bottom surface. The valve retainer 34 has a retainer retention portion at 38 and a valve engaging surface adjacent lead line 28. The first seating surface is non-complementary to the top flange surface at the radially outer edges thereof.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305). Fioravanti et al. discloses the claimed invention except for the amount difference between the first angle and the top flange angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the a difference of about 14 degrees between the first angle and the top flange angle, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

5. Claims 5-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Edwards et al. (U.S. 4,612,960). Fioravanti et al. discloses the claimed invention except for second seating surface. Edwards et al. teaches that it is known to provide a valve seat with multiple seating surfaces (see figures 8-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. with a second seating surface, as taught by Edwards et al., in order to better resist movement of the valve flange with respect to the valve seat.

Regarding claims 7 and 8, the modified Fioravanti et al. invention teaches the claimed invention except for the amount difference between the first angle and the top flange angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the a difference of about 14 degrees between the first angle and the top flange angle, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

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Regarding claims 9, 10, 12, 13 and 20, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the second angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the second angle about 6 degrees, since it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 17-20, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the first angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first angle about 36 degrees, since it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

6. Claims 21, 22 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Rohr (U.S. 5,788,108). Fioravanti et al. discloses the claimed invention except for the cover receiving portion, hinge and cover. Rohr teaches that it is known to provide lid assembly with a cover receiving portion, hinge and cover. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. within a closure assembly comprising a cover receiving portion, hinge and cover, as taught by Rohr, in order to allow the user to apply the assembly onto various containers.

Regarding claims 26-29, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the first angle. It would have been obvious to one having ordinary skill in the art

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at the time the invention was made to make the first angle about 36 degrees, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Also regarding claim 29, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the second angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the second angle about 6 degrees, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

7. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Rohr (U.S. 5,788,108), as applied to claim 22 above, and further in view of Edwards et al. (U.S. 4,612,960). The modified device of Fioravanti et al. discloses the claimed invention except for second seating surface. Edwards et al. teaches that it is known to provide a valve seat with multiple seating surfaces (see figures 8-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. with a second seating surface, as taught by Edwards et al., in order to better resist movement of the valve flange with respect to the valve seat.

8. Claims 30, 31, 35-37 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Rohr (U.S. 5,788,108). Fioravanti et al. discloses the claimed invention except for the container lip, cover receiving portion, hinge and cover. Rohr teaches that it is known to provide container assembly with a container lip, cover receiving portion, hinge and

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cover. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. within a container assembly as taught by Rohr, in order to allow the user to easily remove the closure and reuse the container assembly.

Regarding claims 35-37, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the first angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first angle about 36 degrees, since it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 41 and 42, the modified Fioravanti et al. invention teaches the claimed invention except for the amount difference between the first angle and the top flange angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the a difference of about 14 degrees between the first angle and the top flange angle, since it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

9. Claims 32-34 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Rohr (U.S. 5,788,108), as applied to claim 31 above, and further in view of Edwards et al. (U.S. 4,612,960). The modified device of Fioravanti et al. discloses the claimed invention except for second seating surface. Edwards et al. teaches that it is known to provide a valve seat with multiple seating surfaces (see figures 8-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti

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et al. with a second seating surface, as taught by Edwards et al., in order to better resist movement of the valve flange with respect to the valve seat.

Regarding claims 38, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the first angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first angle about 36 degrees, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Also regarding claim 38, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the second angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the second angle about 6 degrees, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

10. Claims 43-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fioravanti et al. (U.S. 6,273,305) in view of Rohr (U.S. 5,788,108) and Edwards et al. (U.S. 4,612,960). Fioravanti et al. discloses the claimed invention except for the container lip, cover receiving portion, hinge and cover and except for the second seating surface. Rohr teaches that it is known to provide container assembly with a container lip, cover receiving portion, hinge and cover. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. within a container assembly as taught by Rohr, in order to allow the user to easily remove the closure and reuse the container assembly.



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Edwards et al. teaches that it is known to provide a valve seat with multiple seating surfaces (see figures 8-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the valve assembly of Fioravanti et al. with a second seating surface, as taught by Edwards et al., in order to better resist movement of the valve flange with respect to the valve seat.

Regarding claims 45 and 46, the modified Fioravanti et al. invention teaches the claimed invention except for the amount difference between the first angle and the top flange angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the a difference of about 14 degrees between the first angle and the top flange angle, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Also regarding claim 47, 48, 50, 51 and 58, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the second angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the second angle about 6 degrees, since it has been held that “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 55-58, the modified Fioravanti et al. invention teaches the claimed invention except for the size of the first angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first angle about 36 degrees, since it has been held that

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“where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and since a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

### *Response to Arguments*

11. Applicant's arguments filed December 11, 2003 have been fully considered but they are not persuasive. Applicant argues that Fioravanti et al. does not teach that the first seating surface is for retaining the valve and is non-complementary to a top flange surface of the valve. The Examiner disagrees with this position. Fioravanti et al. teaches a first seating surface and top flange surface at lead line 26 in figure 1. Without the first seating surface the valve flange could move upwardly and become unseated in the retaining element. For this reason the seating surface helps retain the valve in the proper position. The non-complementary surface is located at the radially outermost edge of the first seating surface and top flange where the two elements extend away from one another. since they extend away from each other they can be considered non-complementary to the degree set forth in the claims.

12. Applicant also argues that Fioravanti et al. does not teach a non-complementary relationship between a bottom flange surface and a valve engaging surface. The language of claims 1 and 5 do not require a non-complementary relationship on **both** the top flange surface and the bottom flange surface. The language of claims 1 and 5 require a non-complementary relationship on **at least one** of the top flange surface and the bottom flange surface. This limitation is met because there is a non-complementary relationship at the top flange surface.

13. In response to applicant's arguments that Fioravanti et al. does not teach a cover attached via a hinge to a lid, one cannot show nonobviousness by attacking references individually where the

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rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).


14. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

#### *Conclusion*

15. In view of the new grounds of rejection over the secondary reference of Rohr (U.S. 5,788,108), **THIS ACTION IS MADE NON-FINAL.**

16. In order to reduce pendency and avoid potential delays, Technology Center 3700 is encouraging FAXing of responses to Office Actions directly to (703)872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX will be promptly forwarded to the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niki M. Eloshway whose telephone number is (703) 308-1606. The examiner is in the office on Tuesdays and Fridays. Any inquiry of a general nature or relating to the status of this application should be directed to the 3700 Customer Service Office at (703) 306-5648.

  
Niki M. Eloshway/nme  
Patent Examiner  
February 20, 2004